

V100 Multiplexers



Transport services over serial data, ISDN and TCP/IP links with a unique combination of multiplexer and router features specifically designed for tactical and commercial satellite communications needs.



FEATURES AT A GLANCE	V100
Multiplexer	<input checked="" type="checkbox"/>
TCP/IP Router Ports	1
PEP Accelerator	<input checked="" type="checkbox"/>
Voice Channels (Analogue)	to 16
Voice Channels (Digital)	To 30
Serial Aggregate	<input checked="" type="checkbox"/>
TCP/IP Aggregate	<input checked="" type="checkbox"/>
ISDN Aggregate	<input checked="" type="checkbox"/>

Overview

The V100 was originally developed to provide a broad range of multiplexer services to the fixed and mobile satellite communications user. Over time, the V100 has become a central component of hundreds of satcom networks, providing a unique mix of services and capabilities which make wide area networking more efficient or reliable over limited bandwidth or high latency links.

As with all Vocality products, the V100 offers a selection of aggregates. Simple point to point networks could utilise the integrated serial data ports, whilst Inmarsat's GAN would make use of the V100's optional ISDN Terminal Adapter card. Finally, the integrated 10/100 bridge/router port offers remote users connectivity to their office-based LANs, as well as the ability to use IP/UDP as the aggregate .

The main option slots offer users the ability to install a selection of service cards, such as analogue or digital voice, ISDN or serial data. The broad range of interface cards ensure that the V100 is suited to the widest range of applications. The integrated router can be augmented with the optional Performance Enhancing Proxy to ensure maximum throughput of network traffic over high latency links.

The V100 both supports the latest technology such as accelerated TCP/IP, whilst not forgetting the continuing strong demands for legacy data, voice and fax services, still prevalent in the milsatcom environments.

System Suggestions

Simple point to point networks are of course supported. A basic point to point network can operate up to 2Mbps on the serial aggregate, or up to 128Kbps over Inmarsat.

Satellite News Gathering

The V100 is largely considered the standard package for multi-channel SNG communications. The unit offers a cost effective mix of 2 and 4 wire voice circuits as well as reliable, an easy to use network port for email and internet access.

Military

Vocality has 10 years experience providing communications into Land, Sea and Air defence applications. The reliable nature of the V100 ensures it has become a product that can be relied upon for mission critical applications. The management system - a popular feature with military users - is widely regarded as very easy to use, and intuitive such that users with a limited knowledge of the unit can configure and support the equipment without the need for extensive training courses or education.

Commercial Satcom

As many corporate networks are often built around mainstream terrestrial router solutions such as CISCO, Vocality provides the edge connectivity to remote sites. Low bandwidth satcom links are largely considered inefficient if mainstream routers are used, so the Vocality solution extends services with maximum efficiency - ideal in installations where cost and data throughput are critical factors.



V100 Chassis & Functionality In Brief

Chassis (V100 Versatile Multiplexer) :

- 2 Main Option Slots and 1 Special Option Slot
- Integrated 10/100 Base-T Router, 2 Serial Data Ports, Supervisor, Cascading Port
- Optional Performance Enhancing Proxy (PEP)
- Inbuilt Wide Ranging AC Power Supply (100 to 264V AC)
- 1RU 19" Chassis with Fan Cooling

Chassis (V100 Compact Multiplexer) :

- 1 Main Option Slots and 1 Special Option Slot
- Integrated 10/100 Base-T Router, 2 Serial Data Ports, Supervisor, Cascading Port
- Optional Performance Enhancing Proxy (PEP)
- 12V or 48V DC Power Supply
- 1RU Desktop Chassis Convection Cooled

Quad Data Card :

- 4 Ports Up To 2 Mbps
- RS232, V.35, RS422, RS449 and V.11

ISDN Extender

- Extends 64 or 128Kbps (1 or 2B + D)
- S/T RJ45 Interface



Option Cards In Brief

Analogue Voice Card :

- 4 Ports Expandable To 8 Ports
- 2 Wire FXS / FXO or 4 Wire Tie Line
- Presented on RJ45 (RJ11 Compatible)
- Voice Compression G.723.1, G.729A, ADPCM to PCM and NetCoder Algorithm with Echo Cancellation G.168
- Optional Secure Voice Relay Card (STU IIB / STU III)
- FNBDT Compatible

Digital Voice Card:

- E1 : ETSI Q.931, QSIG
- T1 : CCS
- Voice Compression G.723.1, G.729A, ADPCM to PCM and NetCoder Algorithm with Echo Cancellation G.168
- 10 Time Slots Expandable To 24/30 Time Slots
- BNC or RJ45 Interface
- Optional Future Secure Voice Relay Card

ISDN Terminal Adapter :

- ISDN S/T (American or Euro)
- ISDN U (American)

COMPATIBILITY	V25	V50	V200
Serial Data	☑	☑	☑
TCP/IP Routing	☑	☑	☑
PEP Accelerator	☑	☑	☑
Compressed Voice	☑	☑	☑
Secure Voice (Analogue Voice SVR Card)	n/a	☑	n/a
Secure Voice (Digital Voice SVR Card)	☑	n/a	☑

Full specifications are available on request, and in more detail on the Vocality web site.

All information contained in this document is for guidance only and does not form any part of a contract.

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